

FIG.-1
(PRIOR ART)

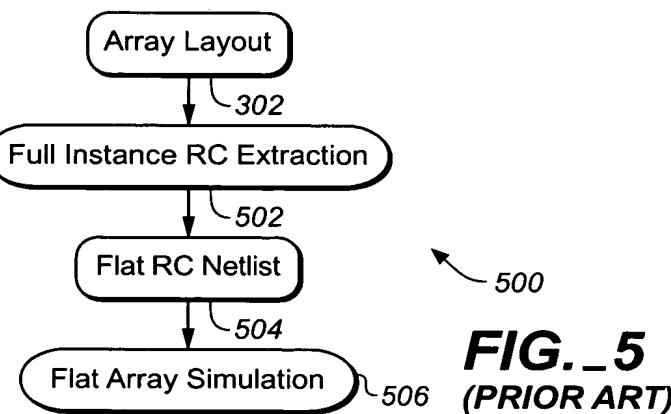
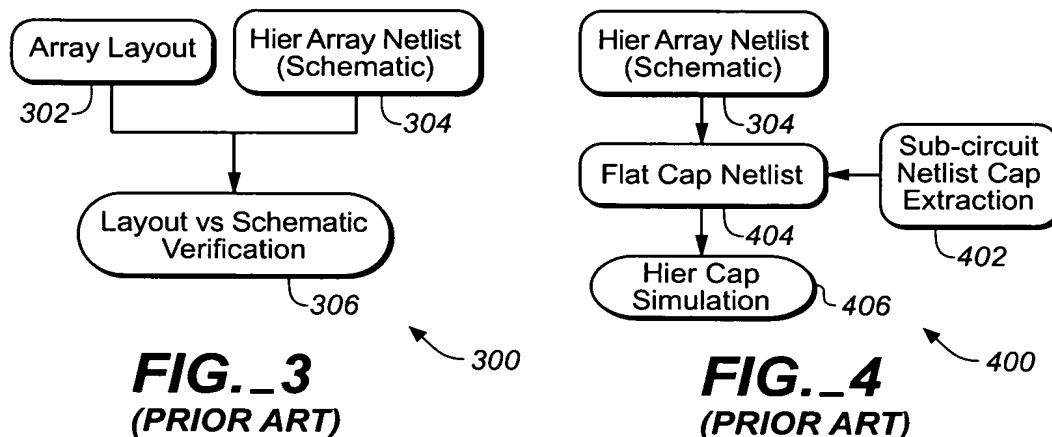
```

.subckt array2x2 w10 w11 b10 b10n b11 b11n
X00 w10 b10 b10n core_cell
X01 w10 b11 b11n core_cell
X10 w11 b10 b10n core_cell
X11 w11 b11 b11n core_cell
.ends

.subckt core_cell wl bla blan
t0 bla w1 n0 vss nm
t1 blan w1 n1 vss nm
t2 n1 n0 vdd vdd pm
t3 n1 n0 vss vss nm
t4 n0 n1 vdd vdd pm
t5 n0 n1 vss vss nm
cp1 bla vss
cp2 blan vss
cp3 wl vss
cp4 n0 vss
cp5 n1 vss
.ends

```

202 204 200

FIG. - 2 (PRIOR ART)

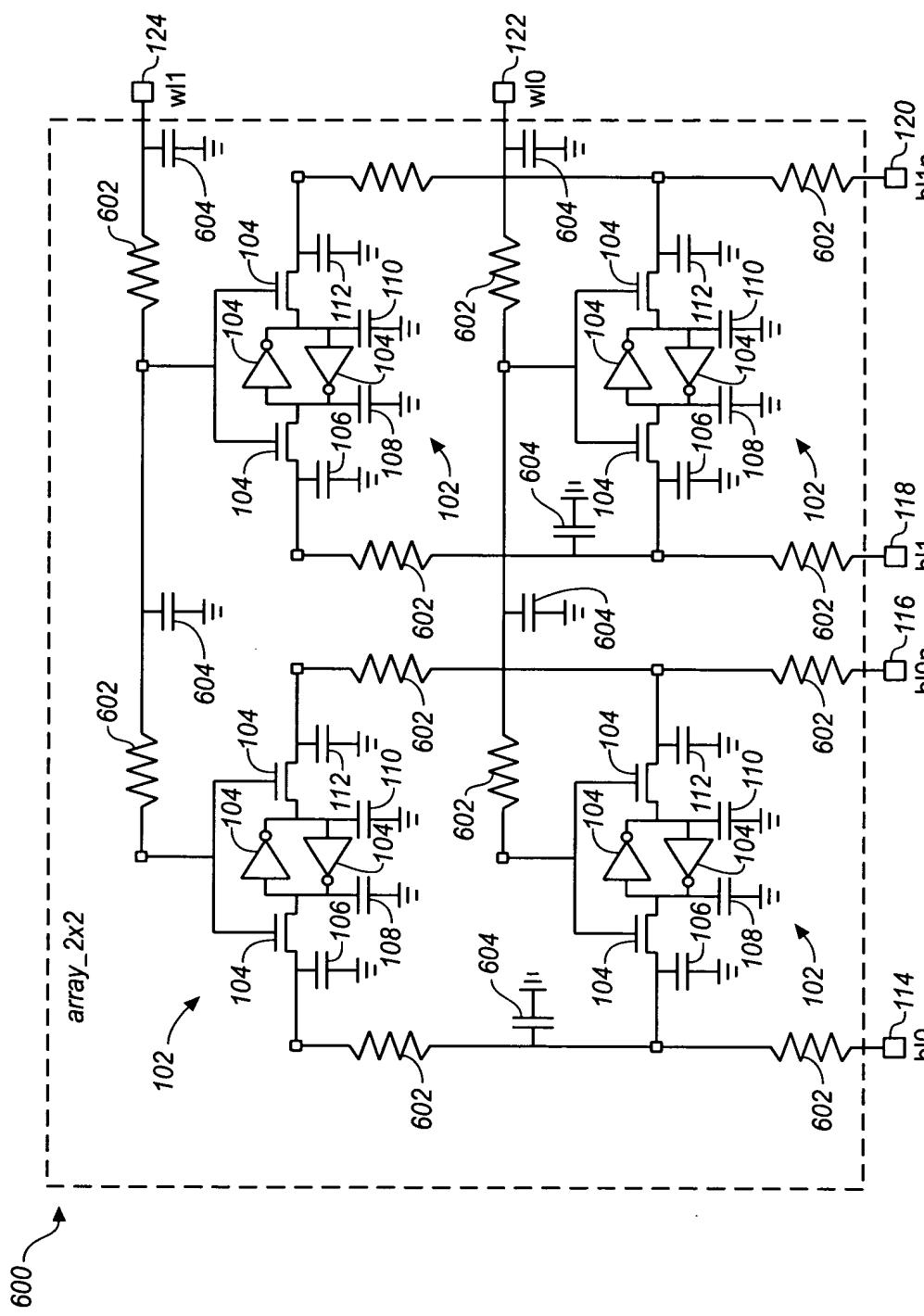


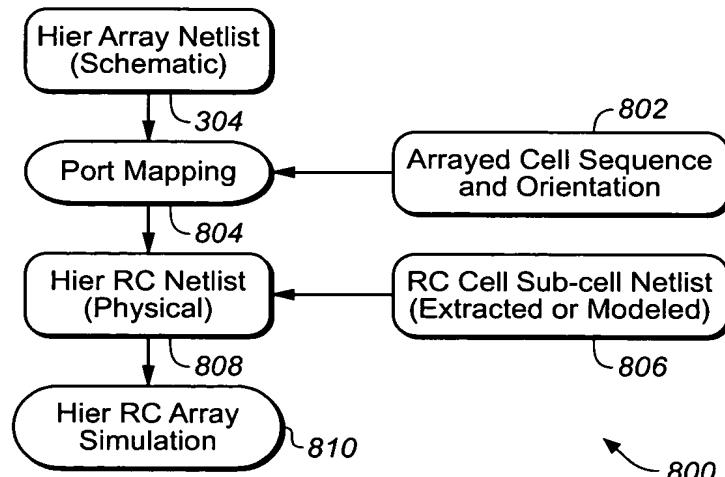
FIG.-6
(PRIOR ART)

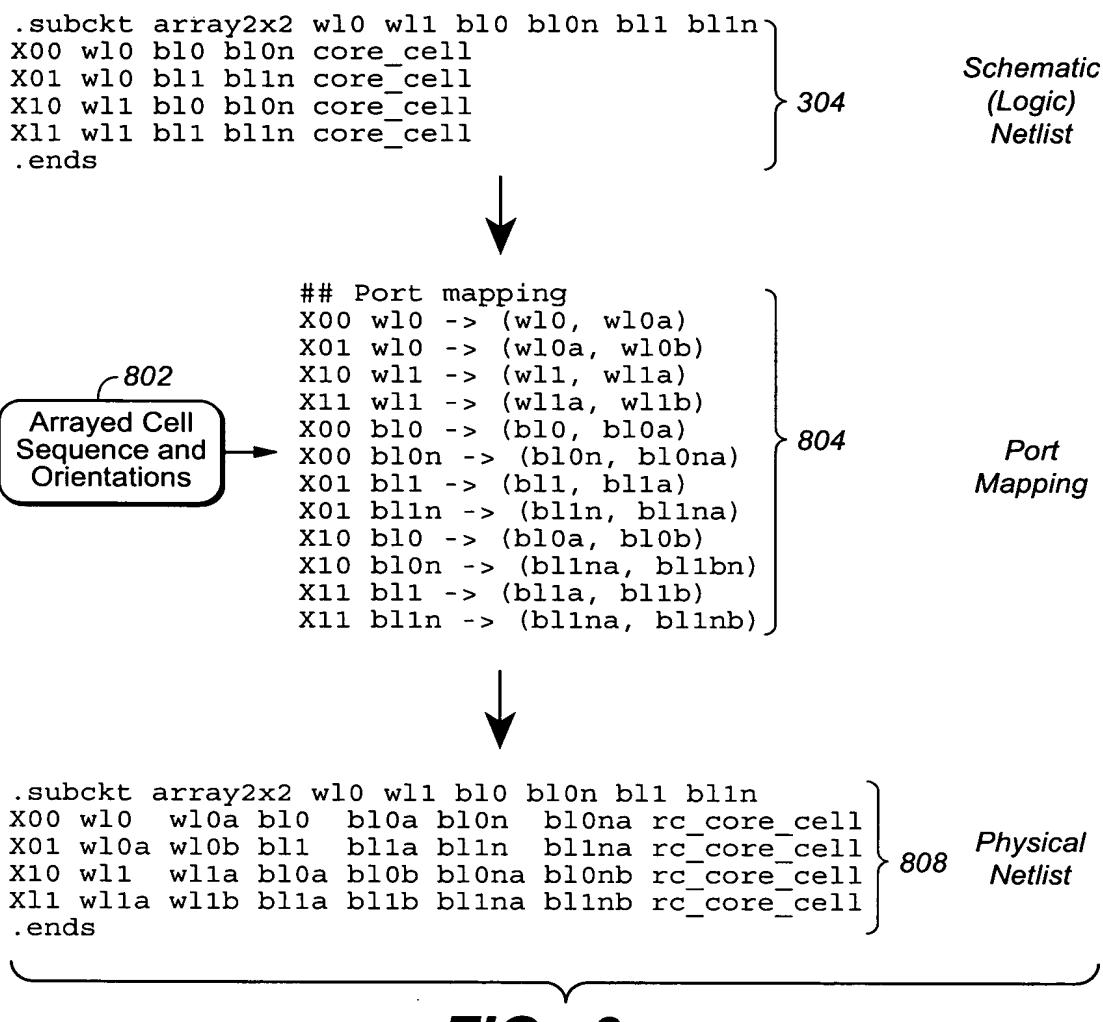
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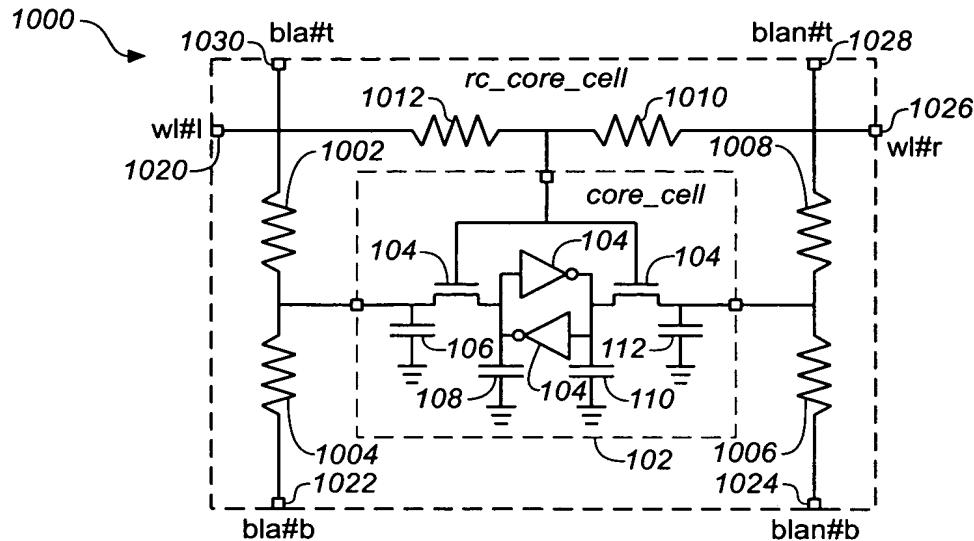
.subckt array2x2 w10 wl1 bl0 bl0n bl1 bl1n
t00 n2 n1 n4 vss nm
t01 n3 n1 n5 vss nm
t02 n5 n4 vdd vdd pm
t03 n5 n4 vss vss nm
t04 n4 n5 vdd vdd pm
t05 n4 n5 vss vss nm
t06 n7 n6 n9 vss nm
t07 n8 n6 n10 vss nm
t08 n10 n9 vdd vdd pm
t09 n10 n9 vss vss nm
t10 n9 n10 vdd vdd pm
t11 n9 n10 vss vss nm
t12 n12 n11 n14 vss nm
t13 n13 n11 n15 vss nm
t14 n15 n14 vdd vdd pm
t15 n15 n14 vss vss nm
t16 n14 n15 vdd vdd pm
t17 n14 n15 vss vss nm
t18 n17 n16 n19 vss nm
t19 n18 n16 n20 vss nm
t20 n20 n19 vdd vdd pm
t21 n20 n19 vss vss nm
t22 n19 n20 vdd vdd pm
t23 n19 n20 vss vss nm
r00 w10 n1
c00 n1 vss
r01 n1 n11
c01 n11 vss
r02 wl1 n6
c02 n6 vss
...
.ends

```

700

FIG.-7 (PRIOR ART)**FIG.-8**

**FIG._9**

**FIG._10**

```
.subckt rc_core_cell wl#r wl#1 bla#b bla#t blan#b blan#t
r1 wl#r wl
r2 wl#1 wl
r3 bla#b bla
r4 bla#t bla
r5 blan#b blan
r6 blan#t blan
x1 wl bla blan core_cell
.ends
```

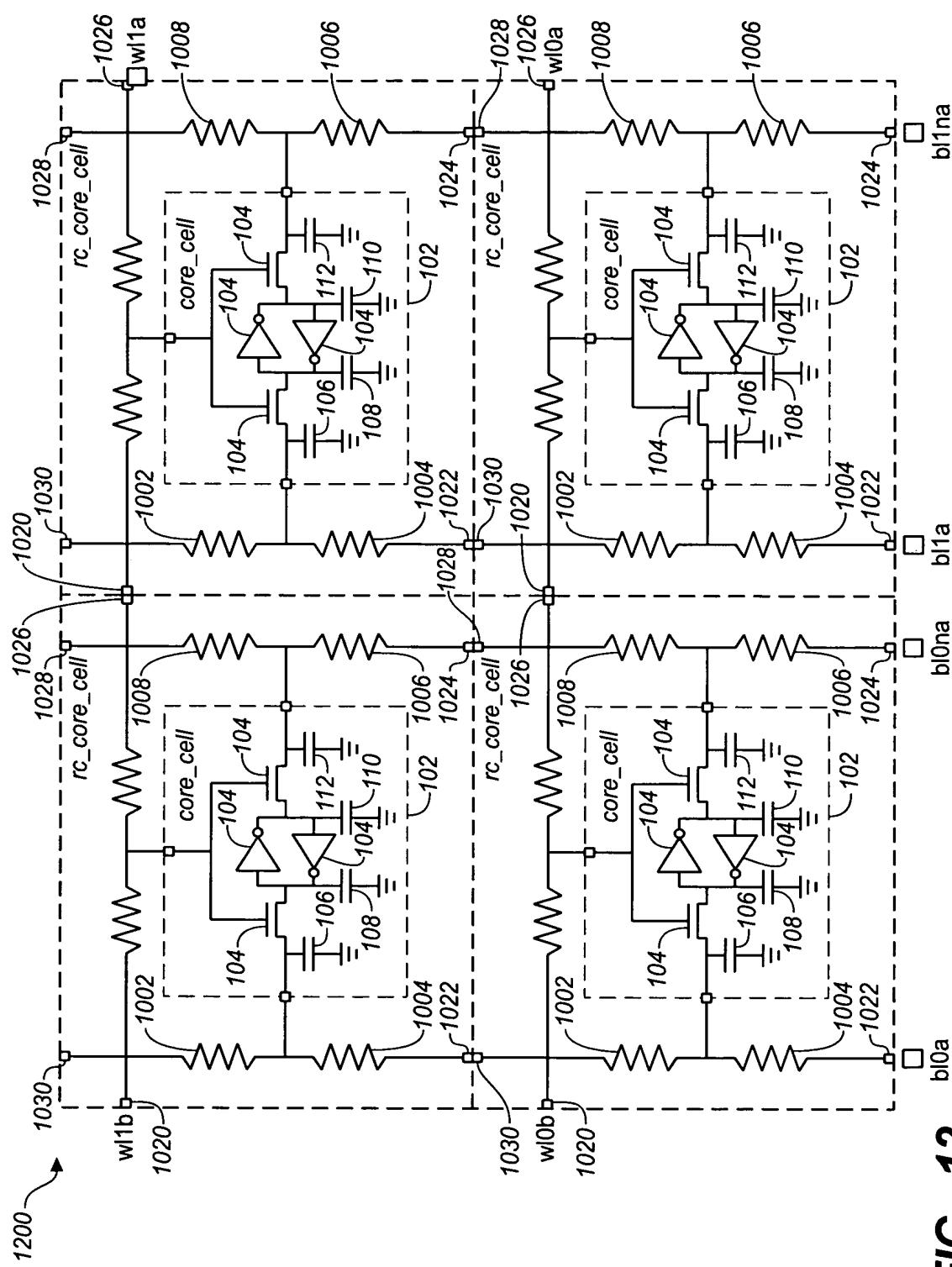
1100

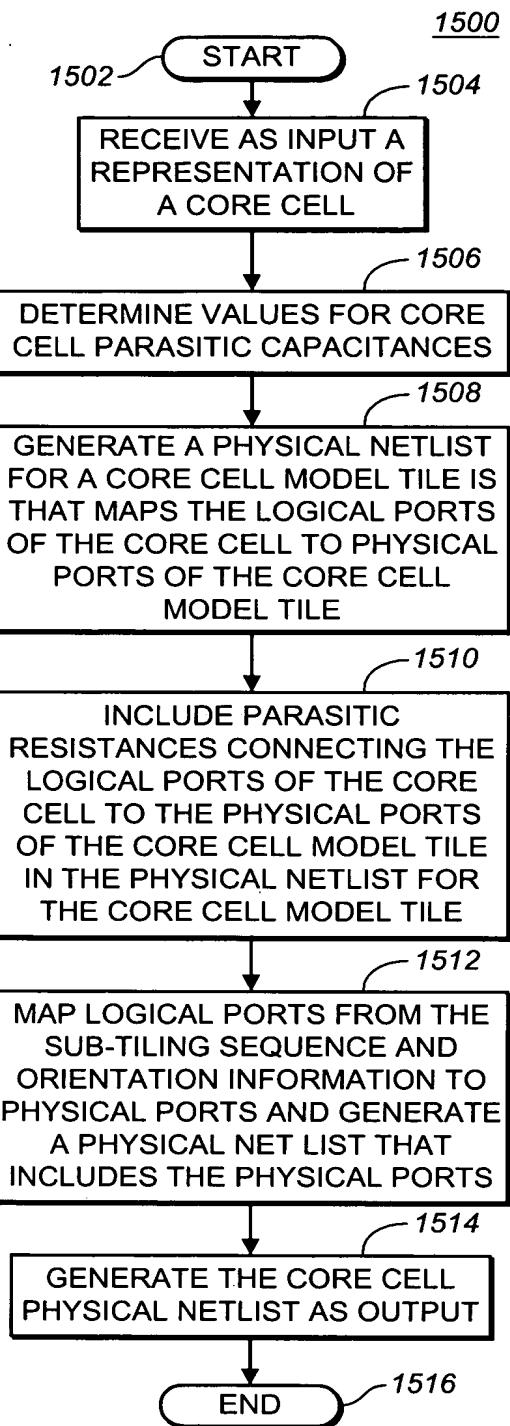
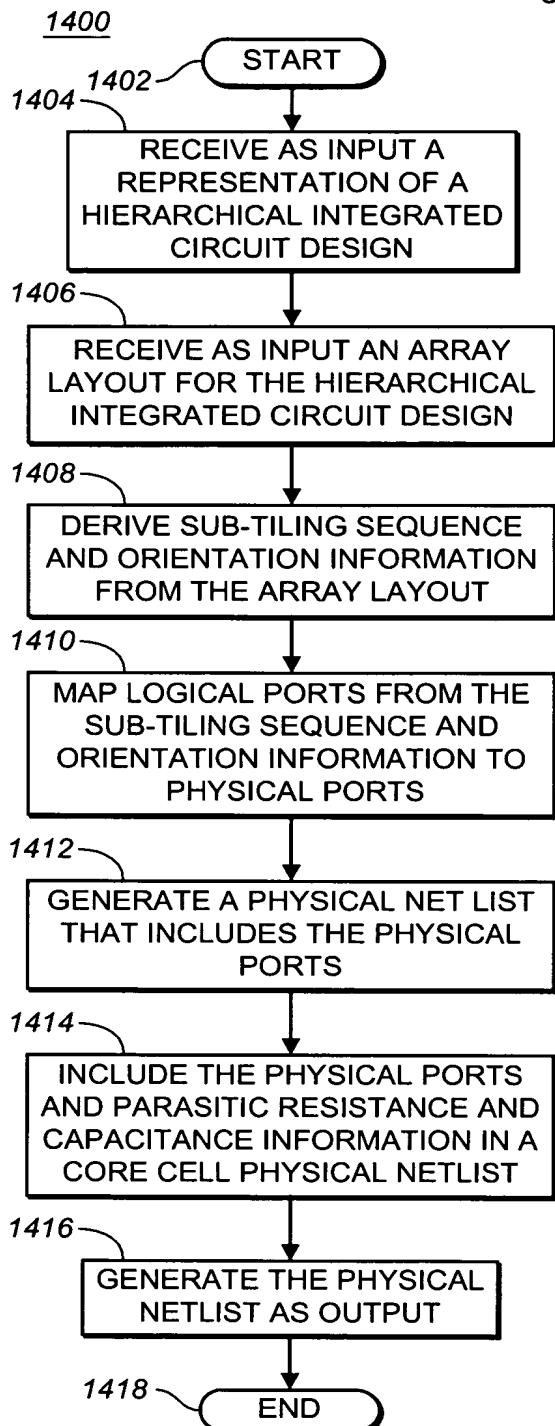
FIG._11

```
.subckt array2x2 w10 w11 b10 b10n b11 b11n
X00 w10 w10a b10 b10a b10n b10na rc_core_cell
X01 w10a w10b b11 b11a b11n b11na rc_core_cell
X10 w11 w11a b10a b10b b10na b10nb rc_core_cell
X11 w11a w11b b11a b11b b11na b11nb rc_core_cell
.ends
```

1300

FIG._13

**FIG._12**

**FIG._14****FIG._15**